

PATENT COOPERATION TREATY

PCT

NOTIFICATION OF ELECTION

(PCT Rule 61.2)

From the INTERNATIONAL BUREAU

To:

Commissioner
US Department of Commerce
United States Patent and Trademark
Office, PCT
2011 South Clark Place Room
CP2/5C24
Arlington, VA 22202
ETATS-UNIS D'AMERIQUE

in its capacity as elected Office

Date of mailing:

11 January 2001 (11.01.01)

International application No.:

PCT/US00/17648

Applicant's or agent's file reference:

AA411M/VB

International filing date:

27 June 2000 (27.06.00)

Priority date:

02 July 1999 (02.07.99)

Applicant:

VENKATESWARAN, Ananthanarayan et al

1. The designated Office is hereby notified of its election made:



in the demand filed with the International preliminary Examining Authority on:

30 August 2000 (30.08.00)



in a notice effecting later election filed with the International Bureau on:

2. The election ☒ was

was not

made before the expiration of 19 months from the priority date or, where Rule 32 applies, within the time limit under Rule 32.2(b).

The International Bureau of WIPO
34, chemin des Colombettes
1211 Geneva 20, Switzerland

Facsimile No.: (41-22) 740.14.35

Authorized officer:

J. Zahra

Telephone No.: (41-22) 338.83.38

INTERNATIONAL SEARCH REPORT

Information on patent family members

International Application No

PCT/88/00/17648

Patent document cited in search report	Publication date	Patent family member(s)	Publication date
US 4529586 A	16-07-1985	AU 6081680 A CA 1162859 A DE 3029306 A DK 360680 A FI 802631 A FR 2463612 A GB 2058103 A GR 69885 A IT 1145700 B NL 8004710 A NO 802492 A SE 8005886 A	26-02-1981 28-02-1984 12-03-1981 24-02-1981 24-02-1981 27-02-1981 08-04-1981 20-07-1982 05-11-1986 25-02-1981 24-02-1981 24-02-1981
EP 0445982 A	11-09-1991	US 5049377 A CA 2036444 A DE 69101069 D DE 69101069 T JP 3029053 B JP 5092912 A	17-09-1991 03-09-1991 10-03-1994 11-08-1994 04-04-2000 16-04-1993
GB 2303857 A	05-03-1997	DE 19629621 A FR 2737213 A JP 9137062 A	30-01-1997 31-01-1997 27-05-1997
WO 9818434 A	07-05-1998	AU 4918597 A BR 9712678 A CN 1239879 A EP 0955990 A	22-05-1998 26-10-1999 29-12-1999 17-11-1999
EP 0460683 A	11-12-1991	CA 2042693 A JP 4270209 A	08-12-1991 25-09-1992
WO 9819655 A	14-05-1998	AU 7666996 A BR 9612766 A EP 0946131 A JP 11500461 T	29-05-1998 07-12-1999 06-10-1999 12-01-1999
US 5326483 A	05-07-1994	NONE	
JP 02243615 A	27-09-1990	JP 2758919 B	28-05-1998
JP 10007534 A	13-01-1998	NONE	

PCT

INTERNATIONAL SEARCH REPORT

(PCT Article 18 and Rules 43 and 44)

Applicant's or agent's file reference AA411M/VB	FOR FURTHER ACTION see Notification of Transmittal of International Search Report (Form PCT/ISA/220) as well as, where applicable, item 5 below.	
International application No. PCT/US 00/ 17648	International filing date (day/month/year) 27/06/2000	(Earliest) Priority Date (day/month/year) 02/07/1999
Applicant THE PROCTER & GAMBLE COMPANY		

This International Search Report has been prepared by this International Searching Authority and is transmitted to the applicant according to Article 18. A copy is being transmitted to the International Bureau.

This International Search Report consists of a total of 3 sheets.



It is also accompanied by a copy of each prior art document cited in this report.

1. Basis of the report

- a. With regard to the **language**, the international search was carried out on the basis of the international application in the language in which it was filed, unless otherwise indicated under this item.



the international search was carried out on the basis of a translation of the international application furnished to this Authority (Rule 23.1(b)).

- b. With regard to any **nucleotide and/or amino acid sequence** disclosed in the international application, the international search was carried out on the basis of the sequence listing :



contained in the international application in written form.



filed together with the international application in computer readable form.



furnished subsequently to this Authority in written form.



furnished subsequently to this Authority in computer readable form.



the statement that the subsequently furnished written sequence listing does not go beyond the disclosure in the international application as filed has been furnished.



the statement that the information recorded in computer readable form is identical to the written sequence listing has been furnished

2. ☐ **Certain claims were found unsearchable** (See Box I).

3. ☐ **Unity of invention is lacking** (see Box II).

4. With regard to the title,

the text is approved as submitted by the applicant.



the text has been established by this Authority to read as follows:

5. With regard to the abstract,

the text is approved as submitted by the applicant.



the text has been established, according to Rule 38.2(b), by this Authority as it appears in Box III. The applicant may, within one month from the date of mailing of this international search report, submit comments to this Authority.

6. The figure of the drawings to be published with the abstract is Figure No.

as suggested by the applicant.



because the applicant failed to suggest a figure.



because this figure better characterizes the invention.



None of the figures.

INTERNATIONAL SEARCH REPORT

International Application No.

PCT/00/17648

A. CLASSIFICATION OF SUBJECT MATTER

IPC 7 A61K7/06

According to International Patent Classification (IPC) or to both national classification and IPC

B. FIELDS SEARCHED

Minimum documentation searched (classification system followed by classification symbols)

IPC 7 A61K

Documentation searched other than minimum documentation to the extent that such documents are included in the fields searched

Electronic data base consulted during the international search (name of data base and, where practical, search terms used)

EPO-Internal, CHEM ABS Data, WPI Data, PAJ

C. DOCUMENTS CONSIDERED TO BE RELEVANT

Category *	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
X	US 4 529 586 A (R. DE MARCO ET AL) 16 July 1985 (1985-07-16) claim 1; examples 5,6 ---	1,7
A	EP 0 445 982 A (DOW CORNING) 11 September 1991 (1991-09-11) claim 1; examples 4,5 ---	1
A	GB 2 303 857 A (GEN ELECTRIC) 5 March 1997 (1997-03-05) cited in the application claim 1 ---	1
A	WO 98 18434 A (PROCTER & GAMBLE) 7 May 1998 (1998-05-07) claim 1 --- -/--	1



Further documents are listed in the continuation of box C.



Patent family members are listed in annex.

* Special categories of cited documents :

- *A* document defining the general state of the art which is not considered to be of particular relevance
- *E* earlier document but published on or after the international filing date
- *L* document which may throw doubts on priority claim(s) or which is cited to establish the publication date of another citation or other special reason (as specified)
- *O* document referring to an oral disclosure, use, exhibition or other means
- *P* document published prior to the international filing date but later than the priority date claimed

T later document published after the international filing date or priority date and not in conflict with the application but cited to understand the principle or theory underlying the invention

X document of particular relevance; the claimed invention cannot be considered novel or cannot be considered to involve an inventive step when the document is taken alone

Y document of particular relevance; the claimed invention cannot be considered to involve an inventive step when the document is combined with one or more other such documents, such combination being obvious to a person skilled in the art.

G document member of the same patent family

Date of the actual completion of the international search

10 October 2000

Date of mailing of the international search report

19/10/2000

Name and mailing address of the ISA

European Patent Office, P.B. 5818 Patentlaan 2
NL - 2280 HV Rijswijk
Tel. (+31-70) 340-2040, Tx. 31 651 epo nl,
Fax: (+31-70) 340-3016

Authorized officer

Voyiazoglou, D

INTERNATIONAL SEARCH REPORT

International Application No

PCT/89/00/17648

C.(Continuation) DOCUMENTS CONSIDERED TO BE RELEVANT

Category *	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
A	EP 0 460 683 A (DOW CORNING) 11 December 1991 (1991-12-11) cited in the application. claim 1 ----	10
A	WO 98 19655 A (PROCTER & GAMBLE) 14 May 1998 (1998-05-14) page 27; claim 1 ----	1
A	US 5 326 483 A (HALLORAN DANIEL J ET AL) 5 July 1994 (1994-07-05) claims 1,6,7 ----	1,10
A	PATENT ABSTRACTS OF JAPAN vol. 014, no. 562 (C-0788), 13 December 1990 (1990-12-13) & JP 02 243615 A (TOYO BIYUUT KK), 27 September 1990 (1990-09-27) abstract ----	1
A	PATENT ABSTRACTS OF JAPAN vol. 1998, no. 05, 30 April 1998 (1998-04-30) & JP 10 007534 A (KOSE CORP), 13 January 1998 (1998-01-13) abstract -----	1

PCT

REC'D 11 SEP 2001

WIPO

PCT

INTERNATIONAL PRELIMINARY EXAMINATION REPORT

(PCT Article 36 and Rule 70)

Applicant's or agent's file reference AA411M/VB	FOR FURTHER ACTION See Notification of Transmittal of International Preliminary Examination Report (Form PCT/IPEA/416)	
International application No. PCT/US00/17648	International filing date (day/month/year) 27/06/2000	Priority date (day/month/year) 02/07/1999
International Patent Classification (IPC) or national classification and IPC A61K7/06		
Applicant THE PROCTER & GAMBLE COMPANY		

1. This international preliminary examination report has been prepared by this International Preliminary Examining Authority and is transmitted to the applicant according to Article 36.



2. This REPORT consists of a total of 7 sheets, including this cover sheet.

- ☐ This report is also accompanied by ANNEXES, i.e. sheets of the description, claims and/or drawings which have been amended and are the basis for this report and/or sheets containing rectifications made before this Authority (see Rule 70.16 and Section 607 of the Administrative Instructions under the PCT).

These annexes consist of a total of sheets.

3. This report contains indications relating to the following items:

- I ☒ Basis of the report
- II ☐ Priority
- III ☐ Non-establishment of opinion with regard to novelty, inventive step and industrial applicability
- IV ☐ Lack of unity of invention
- V ☒ Reasoned statement under Article 35(2) with regard to novelty, inventive step or industrial applicability; citations and explanations supporting such statement
- VI ☐ Certain documents cited
- VII ☒ Certain defects in the international application
- VIII ☒ Certain observations on the international application

Date of submission of the demand 30/08/2000	Date of completion of this report 07.09.2001
Name and mailing address of the international preliminary examining authority:  European Patent Office D-80298 Munich Tel. +49 89 2399 - 0 Tx: 523656 epmu d Fax: +49 89 2399 - 4465	Authorized officer Culmann, J-C Telephone No. +49 89 2399 8487 

INTERNATIONAL PRELIMINARY EXAMINATION REPORT

International application No. PCT/US00/17648

I. Basis of the report

1. With regard to the **elements** of the international application (*Replacement sheets which have been furnished to the receiving Office in response to an invitation under Article 14 are referred to in this report as "originally filed" and are not annexed to this report since they do not contain amendments (Rules 70.16 and 70.17)*):

Description, pages:

1-31 as originally filed

Claims, No.:

1-10 as originally filed

2. With regard to the **language**, all the elements marked above were available or furnished to this Authority in the language in which the international application was filed, unless otherwise indicated under this item.

These elements were available or furnished to this Authority in the following language: , which is:

- ☐ the language of a translation furnished for the purposes of the international search (under Rule 23.1(b)).
- ☐ the language of publication of the international application (under Rule 48.3(b)).
- ☐ the language of a translation furnished for the purposes of international preliminary examination (under Rule 55.2 and/or 55.3).

3. With regard to any **nucleotide and/or amino acid sequence** disclosed in the international application, the international preliminary examination was carried out on the basis of the sequence listing:

- ☐ contained in the international application in written form.
- ☐ filed together with the international application in computer readable form.
- ☐ furnished subsequently to this Authority in written form.
- ☐ furnished subsequently to this Authority in computer readable form.
- ☐ The statement that the subsequently furnished written sequence listing does not go beyond the disclosure in the international application as filed has been furnished.
- ☐ The statement that the information recorded in computer readable form is identical to the written sequence listing has been furnished.

4. The amendments have resulted in the cancellation of:

- ☐ the description, pages:
- ☐ the claims, Nos.:
- ☐ the drawings, sheets:

5. ☐ This report has been established as if (some of) the amendments had not been made, since they have been considered to go beyond the disclosure as filed (Rule 70.2(c)):

**INTERNATIONAL PRELIMINARY
EXAMINATION REPORT**

International application No. PCT/US00/17648

(Any replacement sheet containing such amendments must be referred to under item 1 and annexed to this report.)

6. Additional observations, if necessary:

V. Reasoned statement under Article 35(2) with regard to novelty, inventive step or industrial applicability; citations and explanations supporting such statement

1. Statement

Novelty (N)	Yes: Claims 1-10
	No: Claims
Inventive step (IS)	Yes: Claims
	No: Claims 1-10
Industrial applicability (IA)	Yes: Claims 1-10
	No: Claims

2. Citations and explanations
see separate sheet

VII. Certain defects in the international application

The following defects in the form or contents of the international application have been noted:
see separate sheet

VIII. Certain observations on the international application

The following observations on the clarity of the claims, description, and drawings or on the question whether the claims are fully supported by the description, are made:
see separate sheet

HarCor#2

V. Reasoned statement under Article 35(2) with regard to novelty, inventive step and industrial applicability

The following document is referred to in this communication:

D1 US-A-4 529 586

1. The problem faced by the Applicant is the provision of hair conditioning compositions which provide hair volume-up while not deteriorating conditioning benefits such as softness, moisturized feel, and fly-away control (see on page 2 of the present description).
2. D1 relates to hair conditioning compositions which compulsorily comprise:
 - i) 0.2 to 10% of a cationic silicone emulsion;
 - which comprises "a cationic surfactant such as long chain fatty acid quaternary ammonium compound such as stearylkonium chloride or tallowtrimonium chloride (see D1 at column 2 lines 16 et seq.);
 - in combination with amodimethicone;
 - ii) a cationic surfactant;
 - iii) one cationic polymer;
 - iv) an aqueous carrier.
3. The subject-matter of current claim 1 differs from the compositions according to claim 1 of D1 in that:
 - i) the cationic silicone emulsion comprises
 - 1 to 20% of a cationic surfactant;
 - the emulsified silicone has a particle size of less than 50µm;
 - ii) it comprises 0.1 to 15% of a high melting point (at least 25°C) fatty compound;

iii) the cationic conditioning agent is present in an amount of 0.1 to 10%.

4. It appears that the cationic surfactant found in the cationic silicone emulsion as defined in D1 may be calculated: since it represents about 0.1 to 0.2 by weight of the total composition (see D1 at column 2 lines 27-28), while said emulsion is introduced in a minimum amount of 1.6% by weight (see D1 the examples), it is inferred that the emulsion comprises 6.25 to 12.5% by weight of cationic surfactant.

The cationic surfactant present in the compositions according to D1 (identified in the present application as a useful conditioning agent) is in an amount which "can suitably vary between from about 0.1 to about 1.5% by weight, based on the composition" (see D1 at column 6, lines 32 et seq.); the cationic polymer being present "between from about 0.005 to about 1% by weight based on the total weight of the aqueous composition" (see D1 at column 6, lines 29 et seq.).

As to the "high melting point fatty compound", it may be noted that it is present in some compositions of D1 (see V and VI); it is present in the claimed composition for its (obviously) known properties, i.e. slippery, slick feel, softness, moisturized feel, fly-away control on dry hair). From the description of the present application, it may be concluded that, alone, this component cannot impart the hair volume-up aimed at by the Applicant.

5. As a consequence of the analysis above, two possibilities:
- i) the compositions according to D1 already achieved the hair volume-up aimed at by the Applicant, **who had not to modify or adapt the composition of the prior art in order to achieve said property**; the modifications/adaptions that the Applicant carried out addressed other considerations, which are not found in the current application, or not solved in any unexpected way; then the subject-matter of claim 1 lacks an inventive step in the sense that it does not solve the problem identified;
 - ii) the claimed compositions achieve hair volume-up whereas those according to

D1 do not.

In the latter event, said hair volume-up achievement should result either from:

- i) the specific particle size of the emulsified silicone;
- ii) or from a synergy between any two (or more) of the components listed in current claim 1.

At this stage of the procedure, it must be noted that there is no experimental data which convincingly establish that the compositions as defined in current claim 1 provide some hair volume-up (which could thus be seen as a contribution over the compositions of the prior art in the sense of Article 33(3) PCT) whereas those according to D1 do not.

There is also no evidence from the application documents that, in the event when the claimed compositions make a contribution over the prior art, said contribution relates to i) the emulsified silicone particle size or ii) a synergy between some of the features recited in current claim 1.

6. The subject-matter of claim 1 thus lacks an inventive step in the sense of Article 33(3) PCT; as does the subject-matter of all the dependent claims, since said subject-matter relates to optional components of the compositions according to the present application.

VII. Certain defects in the international application.

The requirements of Rule 5.1 a) ii) PCT are not met, D1 being not identified in the description and the relevant background art disclosed therein being not briefly discussed.

In the Formula II (see on page 14) and IV (see on page 15) the indices a and b are not defined.

VIII. Certain observations on the international application.

The subject-matter of claim 4 is not supported by the description.

As is the subject-matter of claim 5; if the Applicant intended to claim a composition with the amounts of cationic conditioning agent specified in said claim, then all the features appearing on page 26 as filed (see the last formulation) should have been retained.

As is also the subject-matter of claim 8, item (b): the weight of the trimethylol ester oils is therein specified to be "at least about 800" with no upper limitation, contrary to the disclosure of the present description (to about 1200), see on page 23.